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USSR Report

CONSTRUCTION AND EQUIPMENT

(FOUO 2/81)

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EXPERIMENTS TO IMPROVE ECONOMIC MECHANISM REVIEWED

Moscow SOVERSHENSTVOVANIYE KHOZYAYSTVENOGO MEKHANIZMA V STROITEL'STVE (Improving the Economic Mechanism in Construction) in Russian 1980 pp 2, 3-6, 152

[Annotation, foreword and table of contents from book by I. K. Komarov and V. P. Kolosov, Stroyizdat, 152 pages]

[Text] This is being published by a decision of the Literature on the Economics of Construction section of the editorial soviet of Stroyizdat.

The experiences of the economic reform in construction are dealt with. The results of tests during the practice of the new management methods are given. Ways of further improving the economic methods of managing construction are examined. The question of cost accounting for low-level collectives in the system for improving the economic mechanism is dealt with.

The book is intended for administrators and engineering and technical workers in construction organizations and may be used in the economic education system for workers.

Foreword

The abundant knowledge of the party's leadership of the country's economy is reflected in the CPSU Central Committee Decree "Concerning an Improvement in the Economic Mechanism and Tasks for the Party and State Agencies" and the CPSU Central Committee and USSR Council of Ministers' Decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Increasing Production Efficiency and Work Quality." They are also accumulating knowledge on improving, planning and strengthening the economic stimulation of production, which is well known as an economic reform, and a number of experiments that were conducted on an extensive scale which had as their goal the investigation of specific problems in managing the economy and the generalization of advanced management practice and the results of the creative activity of labor collectives. The in-depth and comprehensive study of the knowledge which has accumulated actively assists in translating into reality the measures for improving production efficiency and the quality of work which were specified by the party and government.

In this regard it is of interest to familiarize the reader with the knowledge concerning improving the economic mechanism in construction which was set forth

by I. K. Komarov and V. P. Kolosov in this book. The generalization of the knowledge that was accumulated by the sector during the past decade testifies to the ability of the work to improve the economic methods of managing construction that was done by the CPSU Central Committee, the USSR Council of Ministers, the ministries and departments, and parties and economic agencies to bring about results locally. The material which is contained in the book is a confirmation of the effectiveness of the efforts that were undertaken in this direction and, along with this, indicates the availability of significant potentials which may be used to further improve construction affairs in the country.

The party persistently directs builders toward achieving the end results of construction production--putting production capacities and construction projects into operation. It is not easy to achieve this. The coordinated efforts of many collectives are required--the general contractors, subcontractors, supply agencies, and suppliers of equipment and structural components. It is necessary--and this is hardly the most important thing--to review the relationship of administrators and all participants in the construction process toward the given problem, to increase their responsibility, and to ensure steady professional growth.

It is well known to the author of these lines that life puts great demands on the initiators of something new, since he directed the experiment which was done to further improve planning for the production and economic activity of the Belorussian SSR Ministry of Industrial Construction and to increase the role of economic methods in its work.

The experiment brought in much of what is new of that which construction practice has amassed during recent years. Combining the solution to technological, organizational, planning and economic problems into a complex, the experiment aims at a systematic approach toward solving the problem of increasing the effectiveness of capital investments. The participants in capital construction were oriented toward the end results of their activity--results for the national economy--putting structures and complexes into operation.

In order to solve this problem it is necessary to create a long-term technological production line when calculating for a large construction organization; to transfer to a reimbursement system in the economic plan in the broadest sense of the word; it is necessary to overcome the inertia of the thinking and the burden of the habits which have formed over the years and which lead to the overextension of capital investments.

The experiment was conducted by counting on complete utilization of the internal potentials of construction production. The goals of the experiment were the following: to ensure a growth in commodity production in the amount of 7 to 8 percent, a growth in gross production of 10 to 12 percent for the first 2 to 3 years--until the construction production that is above normal is liquidated (then 7 to 8 percent); to achieve a growth in labor productivity of 6 to 7 percent, and a profitability for production of 8 to 10 percent. It goes without saying that such indices may be ensured by highly organized work, the extensive use of scientific achievements and advanced expertise, a creative relationship toward the work which is assigned and reliable management by the construction sector.

The results of the ministry's work over three years under the conditions of the experiment confirmed the possibility of utilizing existing potentials. The average annual rate of growth for commodity production comprised 12 percent and construction time was reduced for structures by 16 percent as against the level of 1975; construction production above the norm was eliminated.

In addition to this, the experiment specified testing the principally new indices for planning production and evaluating the activities of builders. Construction commodity production acts as one of these indices which confirmed the possibility of concentrating the efforts of all participants in construction toward fulfilling the main task--ensuring that production capacities and construction projects are put into operation. Beginning with the 11th Five-Year Plan this index and a number of the other conditions of the experiment will be used for planning and evaluating the activities of all of the country's construction organizations. It is necessary to utilize the experience in using this index that Belorussian builders have acquired when developing standard documents and methodological instructions. This should be comprehensively studied, toward which, in our point of view, this book contributes to a great degree.

However, it is not only the use of new indices that ensures an improvement in the management mechanism. Overall measures are required for this: improving the structure of managing construction, centralizing a number of functions for managing construction production, changing the system for completely equipping construction sites with materials and equipment, increasing the role of credit, and other measures. Planning and other central agencies must do much in this area.

In addition to this it should be kept in mind that many construction organizations are not sufficiently prepared to reorganize work according to the new indices, have not acquired the needed technical and economic data and do not possess the necessary level of technology. In this regard a huge amount of preparatory work has to be done to realize the above conditions.

The experience of the BSSR Ministry of Industrial Construction testifies to the necessity of improving many of the areas of activity of construction organizations. This process is not completed with the adoption of the party and government's decree. Much work has to be done to create a standard management base, to develop methods of measuring labor productivity according to pure (standard) production or some other index which more accurately reflects the change in labor expenditures for transferring to the new wholesale prices and standards. Intense organizational work is required locally for translating the planned measures into reality. The results of the search which is directed toward improving the multifaceted activities of builders should be thoughtfully analyzed. It appears that a wide audience of readers will get much that is interesting and useful in this book.

N. T. Arkhipets

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CONSTRUCTION

NEW BOOK DISCUSSES FUNDAMENTALS OF DESIGNING CIVIL, INDUSTRIAL BUILDINGS

Moscow OSNOVY PROYEKTIROVANIYA GRAZHDANSKIKH I PROMYSHLENNYKH ZDANIY in Russian 1980 (signed to press 26 Dec 79) pp 2, 239-240

[Annotation and table of contents from book "Fundamentals of Designing Civil and Industrial Buildings", by Boris Yakovlevich Orlovskiy and Anatoliy Alekseyevich Magay, Stroyizdat, 80,000 copies, 240 pages]

[Text] A training manual for builders and technical schools.

The basic principles of typical designs for civil and industrial buildings are stated as well as methodological instructions for working out course and diploma designs for these buildings. Problems with the module system and with the typification and standardization of the buildings being explored are dealt with briefly. The classifications of civil and industrial buildings, their spatial planning arrangement, structural designs and systems, and technological and economic indices are reviewed. General principles for planning microrayons and for designing general plans for industrial enterprises are given.

This is intended for students in secondary educational institutions with the specialty "Industrial and Civil Construction."

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METALWORKING EQUIPMENT

MACHINE BUILDING PROGRESS IN 10TH FIVE-YEAR PLAN, PROSPECTS FOR FUTURE

Moscow VESTNIK MASHINOSTROYENIYA in Russian No 2, Feb 81 pp 3-8

[Article by USSR Gosplan First Deputy Chairman N. I. Ryzhkov: "Machine-Building Development at the Present Stage"]

> [Text] "The effectiveness of the economy is inseparably linked to the acceleration of scientific and technical progress.... Science and production are united and progressive ideas influence production through machines and technology. It follows that machine building plays a unique role in development of the national economy, in increasing labor productivity" (from a speech by Comrade L. I. Brezhnev at the October (1980) CPSU Central Committee Plenum).

The concluding year of the 10th Five-Year Plan was marked by further significant successes in developing the economy of our country. The basic indicators of the "State Economic and Social Development Plan" have been successfully met in an atmosphere of broad socialist competition for successful actualization of the resolutions of the 25th CPSU Congress and a worthy greeting to the 26th Party Congress.

The branches which determine scientific and technical progress have been developed at outstripping rates. The technical level of production has risen; highly productive new types of equipment and technological processes have been introduced. A large social program has systematically been carried out and new frontiers have been reached in developing science and engineering in the 10th Five-Year Plan on the basis of dynamic development of social production and growth in its economic effectiveness.

The Soviet Union possesses an enormous economic, scientific and technical potential. The USSR accounts for one-fifth of world industrial production.

All the achievements of our country are a result of the selfless labor of the glorious working class, kolkhoz peasantry and Soviet intelligentsia, a result of the enormous organizational work of the Communist Party and its Leninist Central Committee, headed by that outstanding political and state activist of today, Comrade Leonid Il'ich Brezhnev.

Machine building was developed at accelerated rates this past five-year plan. Thanks to the unswerving concern of the party and government, domestic machine building has

been transformed into a powerful branch of industry. The resolutions of the 24th and 25th CPSU Congresses defined a broad, comprehensive program of scientific and technical progress and the development of all branches of machine building. Machine building is rightly considered the pivotal branch of our economy. In terms of volume of machine-building output, the USSR is second in the world, and it is first in terms of the production of diesel locomotives, electric locomotives, machine tools, diamond tools, tractors, agricultural machinery and other very important items.

In the 10th Five-Year Plan, production assets in machine building increased by 68 percent. A large number of large enterprises with modern equipment were renovated, built and put into operation in the 10th Five-Year Plan. Machine building continued to develop at outstripping rates as compared with industry as a whole, as was anticipated by the resolutions of the 25th CPSU Congress.

Commodity output volume growth for enterprises of the machine-building ministries was 5.2 percent in 1980 as compared with 1979. The production of such very important types of output as equipment for nuclear power plants, motor vehicles, excavators and bulldozers, apparatus, means of automation and other machinery needed by the national economy increased significantly.

The quality of machine-building output improved. About 13,000 machine-building products are released with the state Badge of Quality.

The proportion of output in the highest quality category in total production volume for machine building as a whole increased nearly two-fold, reaching 36 percent in 1980. Machine-building output is being up-dated intensively -- modern, progressive new equipment and technology is being created and introduced and the products list of machinery being produced is being significantly expanded. During the 10th Five-Year Plan, the machine-building ministries mastered upwards of 17,000 new models of machinery, equipment and devices and a large number of obsolete items were withdrawn from production.

One distinguishing feature of the development of machine building in the 10th Five-Year Plan has been the preferential growth in the release of highly-efficient large unit-capacity machinery and units, automated and automatic equipment complexes, modern devices, means of mechanization and automation which enabled us to improve the technical and economic indicators of a majority of the branches of the country's national economy.

Metallurgical machine building ensured the release of highly productive installations for continuous steel teeming for the very large oxygen convertor shops of "Azovstal'" plant and Novo-Lipetskiy Metallurgical Plant. The very latest pipe mills have been put into operation at a number of plants.

During the 10th Five-Year Plan, capacities and the release of equipment for nuclear power plants more than doubled. The production of fast-neutron reactors was a significant machine-building achievement.

The introduction of progressive power and electrical engineering equipment into the national economy enabled us to lower fuel expenditure per kW-hr of electric power produced and to ensure a relative savings of fuel and energy resources of more than 10 million tons of conventional fuel in 1980 as compared with 1975.

Organizing the production of and developing containerized and packetized shipments are of great importance to raising the level of work mechanization in transport. Shipping one million tons of freight in containers enables us to free up to 1,500 people from loading and unloading work.

Through the introduction of large unit-capacity facilities, labor productivity has increased two- to four-fold and electric power expenditure has decreased nearly eight-fold in the production of weak nitric acid, ammonia and ethylene. In carrying out a CPSU Central Committee resolution, workers in chemical and petroleum machine building increased deliveries of complete sets of technological lines, installations and units 1.8-fold as compared with the Ninth Five-Year Plan. The complete sets of equipment being supplied are more fully factory-finished, which permits a substantial reduction in installation work at construction sites.

During the five-year period, 224 new tractors and pieces of agricultural machinery were developed and the production of 218 was mastered, which permits bringing the products list of machinery being produced up to more than 740 items and a substantial rise in the technical level of the equipment being delivered to sovkhozes and kolkhozes. Assignments on creating and mastering the production of the latest feed procurement and processing equipment, including self-propelled fodder harvesters, highly productive units for artificially drying grasses and preparing feed granules and pellets, as well as large-capacity organic fertilizer spreaders for K-700 and T-150 tractors, were met.

The successes in developing machine building are determined in considerable measure by the status of the machine tool building base. More than half the country's machine tools are being used in machine building and metalworking.

Comrade Leonid Il'ich Brezhnev, CPSU Central Committee General Secretary and USSR Supreme Soviet Presidium Chairman, pointed out the necessity of paying more attention to developing machine tool building at the 25th CPSU Congress. The efficiency of machine building and metalworking, which employ upwards of 40 percent of all the manufacturing-production personnel in industry, depends largely on machine tool building.

Machine tool building is the heart of all machine building. It plays a pivotal role in increasing the efficiency of machine-building production and, in the final analysis, of the national economy as a whole. It is only on the basis of the use of improved machine tools, forging, pressing and casting machinery and high-quality tools that we can achieve accelerated labor productivity growth, higher product quality and the introduction of metal- and energy-saving technology.

Our country has available to it a powerful machine tool building and tool industry which annually produces more than 300,000 machine tools, forges, presses and casting machinery.

In the 10th Five-Year Plan, much work was done in machine tool building to change the structure of the equipment being produced, to manufacture the most productive types. For example, given growth in the overall release of machine tools of 6.4 percent as compared with the Ninth Five-Year Plan, the production of special, specialized, unitized, high-precision, heavy-duty, single-purpose machine tools, automatic and semiautomatic machines and automated conveyors increased by 25-60 percent and the release

of machine tools with numerical preset control increased more than two-fold. The production of modern forging, pressing and foundry equipment and tools increased significantly, and the structure of their release was improved.

During the five years of the 10th Five-Year Plan, forging and pressing equipment production increased by 69 percent in value terms and by 26.9 percent in terms of quantity. The release of forging and pressing equipment to produce precision blanks and foundry equipment for low-waste technology had increased 1.6-fold in 1980 as compared with 1976.

Domestic industry has mastered the release of machine tools with tool magazines (processing centers). The proportion of automated forging and pressing machines in the total release of metalworking equipment has increased, and the production of forging and pressing automatic machines and flow lines has increased 1.8-fold.

Our industry has begun producing automatic industrial manipulators with numerical preset control (robots) for various purposes. During 1976-1980, upwards of 2,700 automatic manipulators were produced. Automatic manipulators play a large role in automating and mechanizing technological processes, foremost in machine building. Multipurpose, computer-controlled automated sectors are being created on a base of robots and technological equipment with numerical preset control. The organization of sectors for small-series and series production ensures two- to three-fold labor productivity growth and eliminates monotonous heavy manual labor.

The recently adopted CPSU Central Committee and USSR Council of Ministers decree "On Significantly Raising the Technical Level and Competitiveness of Metalworking, Foundry and Wood Processing Equipment and Tools" and the CPSU Central Committee decree "On Steps to Increase the Production and Broad Application of Automatic Manipulators in Branches of the National Economy in Light of the Instructions of the 25th CPSU Congress" outline continued development of the machine tool and robot building base. These multilevel documents open up a qualitatively new stage in the development of Soviet machine tool building and tool industry and in the development of robot building.

Instrument making and the production of means of automation have been developed at high rates here. The industrial release of a number of new-generation computer control complexes and computer-instrument complexes has been begun and mastered. We have organized the production of a number of progressive instruments for monitoring, regulating and optimizing technological processes, of analytic apparatus for scientific research, and of instruments to monitor environmental pollution. We have mastered numerical preset control systems using microcomputers for metalworking equipment.

The use of microelectronics in instrument making has been expanded significantly, which has enabled us to significantly improve the operating properties of the items. Production volume increased 3.5-fold in the 10th Five-Year Plan for items using microelectronics.

In the 10th Five-Year Plan, automotive industry achieved significant successes. The release of motor vehicles with diesel motors increased nearly two-fold, which provided the national economy with a considerable fuel savings. Much work is being done on creating new types of trucks and passenger cars, buses and loaders.

At the same time, our main attention has been focused on increasing the economy of operation and productiveness of means of motor transport by continuing to expand the production of vehicles with diesel motors, developing the production of truck trailers and specialized transport, increasing load capacity, reliability and durability, and also by reducing the labor intensiveness of vehicle repair and technical servicing.

Considerable work has been done on developing construction, road and municipal services machine building. A series of highly productive machines has been created to mechanize the labor of construction workers.

At enterprises of machine building for light and food industry, particular attention is being paid to developing and producing highly efficient machine systems which permit the overall mechanization and automation of all production processes, from processing raw material to producing wrapped or packed finished products. Ways have been outlined for further developing this branch, and we have significantly increased the production and raised the technical level of machines and equipment for light and food industry.

All machine-building ministries have done a great deal of work on expanding and updating the assortment of consumer goods, on ensuring that they are produced in amounts which meet the needs of the population.

Problems associated with increasing production efficiency and work quality in all branches of machine building, and foremost those concerning ensuring high rates of labor productivity growth, merit intense scrutiny. One very important prerequisite is to develop the production of and to introduce extensively means of mechanization, and foremost for jobs involving difficult working conditions. Resolution of this task is not just a social and economic problem, but also a most important political one.

The CPSU Central Committee and USSR Council of Ministers properly set the task several years ago of creating a machine-building base for significantly reducing low-productivity manual labor. Certain work has been done along these lines, but the level of mechanization of lift-transport, loading-unloading and warehousing remains low. We are currently working out a comprehensive program for developing the mechanization and automation of these jobs for 1981-1985 which will anticipate correcting existing shortcomings in this area.

The introduction of new equipment is closely linked to solving the problem of improving the quality, reliability and durability of the machines and equipment being produced. This is a complex, multilevel task. It must be resolved with consideration of technical, organizational, economic and social aspects. Only if this is done will the task of improving the quality of machine-building output be carried out successfully.

Machine-building enterprises still continue to manufacture some machinery and equipment which does not meet modern requirements in terms of design, productivity, economy and reliability of operation. It is therefore the foremost concern of the ministries, associations and enterprises to meet the assignments established for significantly increasing the proportion of output in the highest quality category, increasing the service life of machinery, equipment and instruments.

At the November (1979) CPSU Central Committee Plenum, Comrade L. I. Brezhnev said: "Metallurgy and machine building remain an object of special concern. In spite of the enormous scope of metal production, we continue to have not enough." The struggle to save metal is being waged on a broad front in our country. Participating in it are both the metallurgists introducing highly efficient new technological processes and progressive assortments of rolled metal products and machine builders which are succeeding in reducing the metals-intensiveness of the output being produced.

Machine builders have done considerable work on reducing the specific metals-intensiveness of machine-building output -- tractors, turbines, diesel locomotives, motor vehicles. Still, the developers of machinery have large reserves for saving metal. The coefficient of rolled ferrous metals use in machine building has not dropped substantially in recent years. One reason is imperfections in the technological processes of metalworking, the predominance of cutting methods as opposed to various methods of casting and working metals with pressure, and the slow introduction of welded metal components.

Implementation of all the tasks set will require constant improvement in management of the socialist economy. Our party is paying a great deal of attention to this question.

The measures outlined in the CPSU Central Committee and USSR Council of Ministers decree "On Improving Planning and Strengthening the Influence of the Economic Mechanism on Improving Production Efficiency and Work Quality" have occupied an important place in the implementation of this task. The machine-building ministries are doing considerable work on carrying them out. In actualizing the indicated decree, extensive use has been made of the results of economic experiments conducted in the 10th Five-Year Plan on introducing new forms of cost accounting (Ministry of Instrument Making, Automation Equipment and Control Systems, Ministry of Heavy and Transport Machine Building, Ministry of Tractor and Agricultural Machine Building, Ministry of Power Machine Building and Ministry of Electrical Equipment Industry), planning and recording the growth rates of production volume and labor productivity using the indicator of normative net output (Ministry of Heavy and Transport Machine Building and Ministry of Power Machine Building), stimulating the acceleration of technical progress (Ministry of Electrical Equipment Industry) and others.

Scientific research, planning-design and technological organizations of all the machine-building ministries have already been transferred to the new system of planning, financing and economic incentives for work on new equipment. At present, the ministries are working on transferring these organizations to calculations based on work fully completed and accepted by the customer, instead of payment for work in stages.

The country's machine builders engaged very enthusiastically in the socialist competition for a worthy greeting to the 26th CPSU Congress. Leading production workers, collectives, brigades, shops, enterprises, organizations and associations took on higher socialist obligations and are responding with deeds to the resolutions of the June and October (1980) CPSU Central Committee Plenums and the CPSU Central Committee decree "On Socialist Competition for a Worthy Greeting to the 26th CPSU Congress."

The high labor incandescence of the competition is having a profound influence on the country's economic life and is helping to improve the efficiency of the economy, to increase labor productivity.

In order to more fully meet the national economic demand for machine-building output and ensure that materials, fuel, energy and labor resources are saved in every way possible, the plan for 1981, the first year of the 11th Five-Year Plan, anticipates:

preferential growth in the release of highly productive, economical types of machines and equipment and of equipment most needed by the national economy;

the extensive introduction of scientific and technical achievements into production;

the more effective use of the materials, labor and financial resources allocated; further resolution of the social tasks set by the party and government for the Soviet people in the area of machine building.

Based on the available material resources and on the maximum use of production capacities for producing types of output in especially short supply, the volume of machine-building and metalworking output produced in 1981 will be increased by 6.1 percent.

We plan the greatest growth for production of agricultural machinery and equipment for stockraising and feed production, equipment for power engineering and electrification, machine tools, forging and pressing machines, instruments and means of automation.

The volume of production of spare parts for machine-building output is to be increased with consideration of maximum use of production capacities. For a majority of types of output, the growth rate in spare parts production will outstrip the growth in production of corresponding machines and equipment.

We anticipate considerable improvement in the production structure, aimed at preferential growth in the more efficient, better machines and equipment.

Work will continue on reducing the release of obsolescent equipment to a minimum. Simultaneously, the proportion of output in production for less than five years will increase for many types of equipment.

One of the most important directions in developing machine building is the release of machines and equipment which ensure savings in organic fuel. Considerable attention is paid in the draft plan to the production of equipment for nuclear power plants, hydraulic turbines, hot-water recovery units and power-technological units operated on recovered energy resources, and more productive mining equipment.

We intend to develop and master modern new metallurgical machines and high unit-power units which will ensure improvement in the quality of metal output and a broader assortment of that output.

We anticipate increasing the production of progressive machines and equipment for rail rolling stock. We will produce more new mainline diesel locomotives with highly economical four-stroke diesels. We plan to produce the first industrial-series 8,000-hp two-section freight diesel locomotives, which will have improved operating indicators.

We plan to increase the proportion of new and more progressive types of mainline all-metal, large-body, high load-capacity freight cars and special cars for hauling food and chemical products.

We anticipate the development and mastering of the series production of highly productive new machines and equipment for the comprehensive mechanization and automation of lift-transport, loading-unloading and warehousing work, which will ensure an increase in labor productivity at those jobs in industry, construction, agriculture and transport. In this regard, we intend to expand the release of lift-transport and warehousing machines using remote, preset and automatic control and ones with complete sets of freight-grasping devices and automatic manipulators, including continuous-transport equipment.

We plan significant growth in the release of instruments, means of automation and computer equipment.

In 1981, we anticipate increasing the release of the more productive high-precision machine tools, forging and pressing, casting and wood processing equipment.

The release of special, specialized and unitized machine tools, automatic and semi-automatic lines, machine tools with numerical preset control and industrial manipulabors (robots) will be increased.

The task has been set of switching from the release of incomplete sets of equipment to the manufacture of complete sets of machine-tool and machinery systems tailored to meet customer needs and intended for the complete processing of domestic parts, including all operations from working blanks to finishing.

The growth in the release of progressive types of metalworking equipment and delivery in complete sets will enable us to ensure the production of machine-building output without increasing the number of machine tool operators.

The production of progressive types of chemical and petroleum equipment will be increased significantly. In this regard, we anticipate outstripping rates of production for machines with high unit capacity, service life and productivity.

We plan to improve the structure of the oilfield and oil refinery equipment being produced. We are increasing the production of easily-installed equipment for multiple well drilling and the production of high-quality drill bits is increasing. We anticipate continued growth in the delivery of technological lines in complete sets.

We anticipate expanding the products list of complete-set lines and units for ferrous and nonferrous metallurgy, light and food industry, mining, construction and lumbering, and much attention it also being paid to the important direction of scientific and technical progress that includes further development of the production and increased deliveries of machine systems and complexes to the national economy. We anticipate systematic completion of the overall mechanization of agricultural crop production and the creation of a fleet of highly productive farm machinery which will enable us to ensure that agricultural work is done at the agrotechnically best times in all the country's soil and climate zones, higher labor productivity in agriculture and higher output quality. The release of new machinery for stockraising and feed production will be increased significantly.

In electrical equipment industry, we are increasing the release of progressive machines, equipment and assembly components, and production will grow as unit capacity increases.

We plan to improve the construction equipment production structure. In particular, the release of hydraulic-drive excavators with bucket capacities of 0.65 to 2.4 cubic meters will increase by 6.4 percent.

Particular attention has been paid to continued growth in the production of high unit- and load-capacity bulldozers and pipelayers.

Much attention is being paid to increasing the economy and productivity of means of motor transport through the continued expansion of vehicles with diesel motors, developing the production of truck trailers and specialized transport, increasing operating speeds, load capacity, reliability and durability, as well as reducing the labor intensiveness of repair and technical servicing.

We plan to continue increasing the release of progressive technological equipment for light industry, with higher speed parameters and a higher level of automation.

The proportion of those capital investments for machine building being directed into developing power, heavy and transport machine building, electrical equipment industry, agricultural machine building, machine tool industry and the specialized production facilities for general machine-building application is increasing.

In order to carry out the 1981 social tasks, we anticipate producing items which improve the availability of means of transport to the population, equipment for enterprises of the services sphere, and machinery which makes labor easier. The production of cultural and personal-services goods and household items is to increase by 5.9 percent in 1981 as compared with 1980.

The 1981 economic and social development plan for machine building will facilitate the continued development of creative forces and capability in the labor collectives and will ensure solid prerequisites for further improving the efficiency and quality of machine-builder work in the 11th Five-Year Plan.

The basic directions of national economic development in the 11th Five-Year Plan which have been published in the press for nationwide discussion provide an accurate picture of the development of domestic machine building in the five-year period ahead.

As during past five-year plans, machine building is given a special role in the technical equipping of the national economy. The country's machine builders have a full opportunity to carry out with honor the tasks being entrusted to them.

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